

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,666	10/17/2003	Graziano Castaldi	2503-1070	8280
466	7590 04/13/2005		EXAMINER	
YOUNG & T	THOMPSON		HUANG, EV	ELYN MEI
745 SOUTH 2	3RD STREET			
2ND FLOOR			ART UNIT	PAPER NUMBER
ARLINGTON, VA 22202			1625	
2ND FLOOR			L	PAPER

DATE MAILED: 04/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Commons	10/686,666	CASTALDI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Evelyn Huang	1625				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
.1) Responsive to communication(s) filed on 03 Ja	nuary 2005.					
	<u> </u>					
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-7 is/are pending in the application.						
4a) Of the above claim(s) <u>5</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-4,6 and 7</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119	<u>و</u>					
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)□ Some * c)□ None of:						
1.⊠ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) Dotice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	6) Other:	atent Application (PTO-152)				
S Patent and Trademark Office	·					

U.S. Patent and Trademark OTH PTOL-326 (Rev. 1-04) Application/Control Number: 10/686,666 Page 2

Art Unit: 1625

#### **DETAILED ACTION**

1. Claims 1-7 are pending.

#### Election/Restrictions

2. In response to the restriction requirement mailed on 6-25-2004, Applicants have elected without traverse the Group I invention, claims 1-4, 6-7. Claim 5 of Group II invention is withdrawn from further consideration as being drawn to the non-elected invention.

Applicants maintain that claims 1-4, 6-7 are allowable and have requested the rejoining of claim 5. However, claims 1-4, 6-7 are not allowable at present.

#### **Priority**

3. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Italy on 10-21-2002. A certified copy of the application as required by 35 U.S.C. 119(b) has been received.

### Claim Rejections - 35 USC § 102

- 4. The rejection for Claim 6 under 35 U.S.C. 102(b) as being anticipated by Aubert (4529596, PTO-1449) is withdrawn in view of the amendment incorporating the purity to approximately equal to or higher than 99%, thereby setting a demarcation from the prior art compound, wherein the degree of purity is not described.
- 5. The rejection for Claim 6 under 35 U.S.C. 102(b) as being anticipated by Badore (4847265, PTO-1449) is withdrawn in view of the amendment incorporating the purity to approximately equal to or higher than 99%, thereby setting a demarcation from the prior art compound, wherein the degree of purity is not described.

Application/Control Number: 10/686,666 Page 3

Art Unit: 1625

6. The rejection for Claim 6 under 35 U.S.C. 102(b) as being anticipated by Bousquet (WO 99/18100, cited in the search report, equivalent to 6573381, PTO-1449) is withdrawn in view of the amendment incorporating the purity to approximately equal to or higher than 99%, thereby setting a demarcation from the prior art compound, wherein the degree of purity is not described.

## Claim Rejections - 35 USC § 103

7. The rejection for Claims 1-4, 7 under 35 U.S.C. 103(a) as being unpatentable over Aubert (4529596, PTO-1449) or Badore (4847265, PTO-1449) or Bousquet (6573381, PTO-1449, equivalent to WO 99/18110) in view of Berge (Journal of Pharmaceutical Sciences. 1977, pages 1-19) and/or Barth (6028084) is maintained for reasons of record.

Applicants submit that none of the prior art addresses the technical problem underlying the present invention. Berge discloses FDA approved salts without suggesting the methylsulfate salt, whereas Barth refers to a pyrazole compound which is different from clopidogrel.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, clopidogrel is described by Aubert (Example 1), Badore (Example 1c) and Bousquet (Example 14). Aubert generically teaches that the crystalline clopidogrel may be in the pharmaceutically acceptable salt form (column 1, lines 42-51). A crystalline clopidogrel hemisulfate is described by Badore (Example 1e) and Bousquet (Example 15). The instant differs from the prior art clopidogrel hemisulfate in being a clopidogrel alkyl sulfate.

However, alkyl sulfate salt is a well-known pharmaceutically acceptable salt. Moreover, Berge teaches that hemisulfate is a non-FDA approved commercially marketed salt (page 1, Table II) whereas methylsulfate is a FDA approved commercially marketed salt (page 2, Table I). Barth also expressly teaches that methylsulfate is a pharmaceutically acceptable salt (column

Application/Control Number: 10/686,666

Art Unit: 1625

2, lines 37-40). These references suggest the desirability of the methylsulfate. Furthermore, one of ordinary skill in the art fully recognizes that the salt form is applicable to compounds of different structures. The teachings of Berge and Barth therefore would be relevant to other compounds, such as the clopidogrel. At the time of the invention, one of ordinary skill in the art would be motivated to replace the non-FDA approved hemisulfate salt of Badore or Bousquet with the FDA approved methylsulfate as taught by Berge and Barth to arrive at the instant invention. In the absence of unexpected results in a side by side comparison, the instant remains obvious over the prior art of record.

Page 4

### Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The description that a clopidogrel and clopidogrel hemisulfate having purity approximately equal to or higher than 99% is not found in the specification.

### Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1625

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aubert (4529596, PTO-1449) or Badore (4847265, PTO-1449) or Bousquet (6573381, PTO-1449, equivalent to WO 99/18110).

Aubert discloses a highly purified clopidogrel of Example 1 (column 3). Badore discloses a highly purified clopidogrel (column 6, Example 1c) and clopidogrel hemisulfate (column 6, Example 1e). Bousquet discloses a highly purified clopidogrel (Example 14) and clopidogrel hemisulfate (Example 15).

While the degree of purity has not been disclosed in the compounds of Aubert, Badore and Bousquet, it is the routine quest for the artisan to improve the purify of the known compound. Changing the form, purity or other physical characteristic of an old product does not render the new form patentable where the difference in form, purity or characteristic is inherent or rendered obvious by the prior art. In re Cofer 148 USPQ 268.

#### Conclusion

- 10. No claims are allowed.
- 11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number: 10/686,666 Page 6

Art Unit: 1625

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn Huang whose telephone number is 571-272-0686. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sup Huang

Primary Examiner

Art Unit 1625